

DETAILED ACTION

1. In view of the papers filed May 9, 2007, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by addition of inventor Jan-Eirik Ellingsen.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of Office records to reflect the inventorship as corrected.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Recitation of “the pore depth” and “the pore diameter” lack sufficient antecedent basis.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 7, 14-19, 24, 25, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Branemark et al. (4,330,891). Branemark et al. disclose an implant and method for treating an implant surface comprising providing fluorine and/or fluoride on a part of the surface and providing a microroughness with pore diameter of between 10 nm to 1000 nm, which would have root-mean-square roughness of ≤ 250 nm, since Branemark et al. show surface with pore sizes that would have root-mean-square roughness of ≤ 250 nm as disclosed in Applicant's specification. The implant surface is a metallic implant surface. The implant is a metallic implant made of pure titanium and the implant is orthopaedic implant.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 6, 8-13, 20-23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branemark et al. in view of Ellingsen et al. (WO 95/17217). Branemark et al. disclose an implant and method that shows the limitations as described above; however, they do not show the microroughness provided by treatment with an aqueous solution of hydrofluoric acid, macroroughness on the implant surface prior to providing the microroughness and the concentration of the fluorine and/or fluoride. Ellingsen et al. teach an implant and method that shows microroughness provided by treating the metallic implant surface with aqueous solution of less than 0.5 M (such as 0.1 M) hydrofluoric acid and etching period of up to 180 sec at room temperature, and providing macroroughness by blasting the implant surface prior to

microroughness. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Branemark et al. with the steps of Ellingsen et al. in order to improve rate of bone tissue attachment in the implant and have beneficial effect of the fluorine and/or fluoride on the surface. Using the hydrofluoric acid solution of Ellingsen et al. at conditions shown in Ellingsen et al. would provide fluorine and/or fluoride in the range of concentration as claimed. It would have been an obvious matter of choice to one of ordinary skill in the art as to the relative size of pore with respect to microroughness. Ellingsen et al. teach the implant of a dental implant in order to provide an implant in the jaw bone.

Conclusion

8. Any inquiry concerning this communication from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Melba Bumgarner/
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